# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:

Matti SALMI : Confirmation No.: 4491

Serial No: 10/099,853 : Examiner: Thuong NGUYEN

Filed: March 13, 2002 : Group Art Unit: 2155

For: SEPARATION OF INSTANT MESSAGING USER AND CLIENT IDENTITIES

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# AMENDED APPEAL BRIEF

Sir:

This Amended Appeal Brief is in response to the Notification of Non-Compliant Appeal Brief of November 1, 2007, which was in response to the Appeal Brief filed September 24, 2007.

#### I. REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))

The real party in interest in this appeal is Nokia Corporation, a corporation organized under the laws of Finland

### II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))

There are no related appeals or interferences.

#### III. STATUS OF CLAIMS (37 C.F.R. § 41.37(c)(1)(iii))

Claims 1-67 are pending in the application. Claims 1-12, 14-26, 28-39, 41-53, 55-59, 61-62, 64-65 and 67 are rejected, and claims 13, 27, 40, 54, 60, 63 and 66 are objected to as being dependent upon a rejected base claim. The rejection of claims 1-12, 14-26, 28-39, 41-53, 55-59, 61-62, 64-65 and 67 is being appealed.

#### IV. STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))

No after final amendments were submitted, and therefore all amendments filed have been entered.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))

The independent claims are 1, 15, 28, 42, 56, 59, 61 and 64. Independent claim 1 recites a method for communicating a primitive from a terminal device (18, 19) to a network (17). See Figure 2A; see also specification page 15, lines 13-15. The primitive has information elements with a structure recognized by the terminal device (18, 19) and at least one other entity (27, 28) able to communicate over said network. See Figures 1B & 2A; see also page 16, lines 8-16. The method includes providing the primitive with an information element (Client-ID) identifying a client (20, 22) of the terminal device (18, 19). See specification page 19, lines 10-13. The method also includes providing the primitive also with an information element (User-ID) identifying a user (23, 24, 25, 26) of the client (20, 22). See specification page 19, lines 10-13.

Independent claim 15 recites a system (17) for communicating identification information over a network. See Figure 2A. The system includes at least one terminal device (18, 19) for providing a primitive with an information element identifying a client of the terminal device

(Client-ID); see also Figure 1B. The terminal device (18, 19) is also for providing the primitive with an information element identifying a user of the client (User-ID). See specification page 19, lines 10-13; see also Figure 1B. The system (17) also includes at least one other entity (27, 28) for receiving the primitive provided over said network. See specification page 15, line 29—page 16, line 7; see also Figure 2A. The information element identifying a client of the terminal device (Client-ID) and the information element identifying a user of the client (User-ID) are used by the at least one other entity (27, 28) to distinguish the user and the client. See specification page 17, line 24—page 18, line 4; see also page 19, lines 14-22.

Independent claim 28 recites a device (18, 19) for communicating a primitive over a network. See Figure 2A. The primitive has information elements with a structure recognized by at least one other entity (27, 28) of the network. See specification page 20, lines 8-28. The device recited in claim 28 is configured to provide the primitive with an information element identifying a client of the device (Client-ID). See specification page 17, lines 24-28 & page 19, lines 10-13; see also Figure 2C (20a). The device is also configured to provide the primitive with an information element identifying a user of the client (User-ID). See specification page 17, lines 24-28 & page 19, lines 10-13; see also Figure 2C (20b).

Independent claim 42 recites a server (27, 28) for communicating a primitive over a network. See Figure 2A. The primitive has information elements with a structure recognized by clients (20, 22) being able to communicate with the server over the network. See specification page 19, line 23—page 20, line 7. The primitive comprises an information element identifying a client (Client-ID), and an information element identifying a user of the client (User-ID). See specification page 17, lines 24-28; see also Figure 1B.

Independent claim 56 recites a physical device (18, 19) that includes a client (20, 22). See Figure 2A. The client comprising various layers including a service capabilities layer (10) responsive to various constituent information elements for combination into an outgoing primitive. See specification page 19, lines 23-28; see also Figures 1B & 2D. The various constituent information elements including an information element identifying the client of the physical device (Client-ID) and an information element separately identifying a user of the client (User-ID). See specification page 17, lines 24-28; see also Figure 1B.

Independent claim 59 recites a system for communicating a primitive over a network.

See Figure 2A (17). The system includes at least one terminal device (18, 19) and at least one other entity (27, 28). See Figures 2A & 2C. The terminal device includes means (20a) for providing the primitive with an information element identifying a client of the terminal device (Client-ID). See specification page 19, lines 10-13; see also Figure 2C. The terminal device also includes means (20b) for providing the primitive also with an information element identifying a user of the client (User-ID). See specification page 19, lines 10-13; see also Figure 2C. The at least one other entity includes means for receiving the primitive provided by the terminal device over the network. See specification page 19, lines 14-22. The information element identifying the client of the terminal device (Client-ID), and the information element identifying the user of the client are used by the at least one other entity to distinguish the user and the client (User-ID). See specification page 17, lines 24-28; see also Figure 1B.

Independent claim 61 recites a device for communicating a primitive over a network. See Figure 2C (20). The primitive has information elements with a structure recognized by at least one other entity of the network. See Figure 1B & 2A. The device includes means (20a) for providing the primitive with an information element identifying a client of the device (Client ID). See specification page 19, lines 10-13; see also Figure 2C. The device also includes means (20b) for providing the primitive also with an information element identifying a user of the client (User-ID). See specification page 19, lines 10-13; see also Figure 2C.

Independent claim 64 recites a server for communicating a primitive over a network. See Figure 2C (27); see also specification page 18, line 5—page 19, line 22. The primitive has information elements with a structure recognized by clients being able to communicate with the server over said network. See Figures 2A & 2C. The primitive includes an information element identifying a client of a terminal device (Client-ID), and an information element identifying a user of the client (User-ID). See specification page 17, lines 24-28; see also Figure 1B.

# VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))

Claims 1-5, 7-12, 14-19, 21-26, 28-32, 34-39, 41-46, 48-53, 55-59, 61, 62, 64 and 65 are rejected under 35 U.S.C. §102(e) as being anticipated by Aravamudan et al. (U.S. Patent No. 6,301,609).

Claims 6, 20, 33, and 47 are rejected under 35 U.S.C. §103(a) as being unpatentable over Aravamudan in view of Mendiola (U.S. Patent Application Publication No. 2002/0006803).

#### VII. ARGUMENT (37 C.F.R. § 41.37(c)(1)(vii))

#### Rejection under 35 U.S.C. § 102(e) over U.S. Patent No. 6,301,609

#### Claim 1

Appellant respectfully submits that claim 1 is not disclosed or suggested by

Aravamundan, because Aravamundan fails to disclose or suggest all of the limitations recited in claim 1. It is well settled a single prior art reference anticipates a patent claim if it expressly or inherently describes each and every limitation set forth in the patent claim. Verdegaal Bros., Inc., v. Union Oil Co., 2 USPQ2d 1051 (Fed. Cir. 1987). Inherent anticipation requires that the missing descriptive material is "necessarily present," not merely, probably or possibly present, in the prior art. Trintec Industries, Inc. v. Top-U.S.A. Corp. 63 USPQ2d 1597, (Fed. Cir. 2002). Aravamundan at least fails to disclose or suggest communicating a primitive from a terminal device to a network, and providing the primitive with an information element identifying a client and a separate information element identifying a user of the client. Furthermore, the term "client" as used in Aravamundan refers to a user of an electronic device, i.e. CPE used to access services. As such, the meaning of "client" as recited in claim 1 is distinct from the way the term is used in Aravamundan, and as a result the teachings of Aravamundan do not disclose or suggest claim 1 as asserted by the Office. Therefore, for at least these reasons appellant respectfully requests withdrawal of the rejections.

Claim 1 recites a method in which a primitive is communicated from a terminal device to a network, and the primitive is provided with an information element identifying a client of the terminal device, and an information element identifying a user of the client. Therefore, claim 1 recites that a separate information element is used to identify the client and the user, and furthermore both information elements are provided in the <u>same</u> primitive. As such, the method of claim 1 provides a primitive containing separate information elements for the user and the client from the terminal device to the network.

In contrast to claim 1, Aravamundan does not disclose or suggest that separate information elements for a user and a client are provided in the same primitive from a terminal device to a network. Instead, Aravamundan at most discloses that after a user has registered with a provisioning server by entering a selected password, the provisioning server provides the client premises equipment (CPE) software with a unique identification (ID). See Aravamundan

column 6, lines 49-53. The provisioning server may also convey a copy of the address of the user's IM server and password to the Communication Services Platform (CSP), which can then create personal and administrative databases for the user and convey the unique ID to the IM server creating a new IM account for the user. See Arayamundan column 6, lines 54-60. However, Arayamundan never discloses or suggests communicating a primitive provided with separate information elements identifying the client and the user from a terminal device to a network. The unique ID is not provided from a terminal device to a server as recited in claim 1, but instead from the CSP to the IM server. In addition, the unique ID of the CPE software is not provided in the same primitive as an information element identifying the user. Instead, the user's IM server address and password are provided separately to the CSP, which does not then convey this information to the IM server, because the IM server has no need for its own identification. Compare claim 1, in which it is recited "providing said primitive with an information element..." and "providing said primitive also with an information element..." (emphasis added). Therefore, claim 1 makes clear that the information elements related to the client and user are separate and provided in the same primitive. In contrast, Arayamundan does not disclose that the information related to a user and client are separate and provided in the same message as recited in claim 1.

Furthermore, Aravamundan discloses that the CPE software generates a message indicating the user's online state and current user address, and conveys the message to the IM server. See Aravamundan column 7, lines 5-8. The user's address refers to the address of the user's CPE device, i.e. personal computer, wired telephone or cellular telephone (see Aravamundan column 3, lines 30-35), and is not an information element identifying the CPE software itself, but only refers to the address to which the CPE device is attached. See Aravamundan column 7, lines 10-20. Therefore, the message conveyed to the IM server is not provided with an information element identifying the user and a separate information element identifying the client, because the address only refers to the CPE device. One of ordinary skill in the art would understand that the CPE device is not the equivalent of the client referred to in claim 1. See e.g. specification page 14, lines 23-24. Therefore, Aravamundan at least fails to disclose or suggest providing a primitive with an information element identifying a client and a separate information element identifying a user of the client. Instead, Aravamundan at most

discloses providing separate messages with information related to CPE software and the user of the CPE software

In addition, in response to Applicant's previously arguments to the non-final Office Action of September 11, 2006, the Office states that Aravamudan discloses the method of identifying the client "via the client's client premises equipment through the third party provider for Instant Message service and the service provider." Appellant respectfully submits that the meaning of "client" in Aravamudan is not the same as it is in the instant application, and therefore the assertions of the Office relying upon the teachings of Aravamundan with respect to the client are incorrect with respect to the present application.

At column 3, lines 25-35, Arayamudan teaches:

FIGS. 1 and 2 are block diagrams illustrating exemplary architectural configurations for practicing the principles embodied in the present invention. A service provider 120 provides <u>client</u> access to one or more networks for communication and data example via a plurality of client premises equipment (CPE) 140. For example, the CPE 140 may include, but is not limited to, a <u>client's</u> personal computer (PC) 142, wired telephone 144 or screen phone, wireless cellular phone 150 or screen phone, wireless or wired personal digital assistant (PDA) 146 or other data or communication devices synchronized with a telephone or cellular phone, and/or a cable modern 148 (emphasis added).

Aravamudan did not explicitly define the word "client." However, by reading the above paragraph, a person skilled in the art would understand the word "client" to mean a user that is provided with a service. The user is able to access the service via one or more electronic devices (CPE). One of skill in the art would understand that the user may be a recipient of a service and may own or operate a CPE device such as a personal computer, a wire telephone or screen phone, a wireless cellular phone or screen phone, a wireless or wired personal digital assistant (PDA) or other data or communication devices.

In the present application, the word "client" is particularly defined as an implementation of a service that allows one or more users to access the service. The client may be hardware, software, or any combination thereof (see specification page 14, line 23-27). As such, the client may be implemented in a device (or CPE), but certainly not be regarded as a user of the CPE or the CPE itself. Therefore, in the above-cited passage, "a client's CPE" can only be logically interpreted as "a user's CPE."

Further, at column 4, line 65-column 5, line 13, Arayamudan teaches:

FIG. 2 shows an IM server 130 outside of the service provider 120 domain. The IM server 130 interfaces with and services the **client** via the **client's CPE 140** and the **client's** proxy presence within the Communication Services Platform (CSP) 160 via a Services Executive 164. In the embodiment illustrated in FIG. 2, the IM server is a third party server, maintained and operated by a third party provider. The client is registered with both the third party provider for the Instant Message service and with the service provider 120 for data and communication access over multiple networks. The Instant Message (IM) server 130 may be implemented as a stand-alone service provided by the third party provider, or in the alternative, may be incorporated within the Communication Services Platform (CSP) 160, in which case a single third party provider provides the services and features associated with both the CSP 160 and the IM server 130 (emphasis added).

Again, this paragraph can only be understood if the word "client" is understood to mean 
"user." The user is registered with service provider and the service provider, in turn, identifies 
the user, not the client (the hardware, software, or any combination thereof that implements the 
service in a CPE). Therefore, the term "client" in Aravamudan has a different meaning as the 
term "client" used in the present specification, and Aravamudan confuses a client with a user.

The Office further asserts that Aravamudan discloses the method of <u>identifying the user</u> "based on the registers address of the user's Instant message server and provisions the client CPE software with a unique identification." At column 6, lines 45-53, Aravamudan teaches the following:

In accordance with step 204, the user is provided with provisioning software for use with his CPE. The user installs the provisioning software onto his CPE device(s). The user connects and registers, via his CPE, to the provider's secure provisioning server by entering his selected password, when prompted, in accordance with step 206. The provisioning server, in accordance with step 206, registers the address of the user's Instant message server and provisions the client CPE software with a unique identification (ID) (emphasis added).

Here, the term "user" is similar as the term "user" used in the instant application and, therefore, it is interchangeable with the term "client" in the earlier cited passages of Aravamudan. As shown in Figure 4 of Aravamudan, at the registration, the user provides name and password (step 206), and the server registers the address of the user's Instant message server and assigns a unique ID (step 208). The Office asserts that "The clients in Aravamudan may include, but is not limited to, a client's personal computer (PC), wired telephone or screen phone, wireless cellular phone or PDA. Therefore, the clients in Aravamudan already overcome the claim limitation in the invention of client. According to the description in the specification, client may be hardware, software or any combination thereof. Maybe means maybe yes or

maybe no. Therefore, Aravamudan still overcome the claim limitation." However, appellant respectfully disagrees with the Office's statement.

Aravamudan only teaches that client premise equipment (CPE) may include, but is not limited to, a client's (a user's) personal computer (PC), wired telephone or screen phone, wireless cellular phone or PDA. A CPE, as per Aravamudan's examples, is a physical device that a user may use to access a service. A "client", as in the instant application, is an implementation of a service. Although according to the instant specification, a client may be hardware, software or any combination thereof, it has to be implemented in a device, such as those defined by Aravamudan as a CPE, in order for a user to access the service. Therefore, the interpretation of a client as a CPE device is incorrect, and based on at least incorrect interpretation of Aravamundan, Aravamundan cannot disclose or suggest the limitations recited in claim 1.

Based on the above, the method as claimed in claim 1 is believed to be patentable with regard to Aravamudan. Appellant respectfully requests the rejection of claim 1 be reversed and withdrawn by the Board.

### Claims 2-5, 7-12, 14 and 67

Claims 2-5, 7-12, 14 and 67 all ultimately depend from independent claim 1, and therefore are not disclosed or suggested by Aravumundan at least in view of their dependencies.

#### Claim 15

Independent claim 15 contains limitations similar to those recited in claim 1, and is rejected for the same reasons as claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claim 15 is not disclosed or suggested by Aravamundan.

#### Claims 16-19 and 21-26

Claims 16-19 and 21-26 all ultimately depend from independent claim 15, and therefore are not disclosed or suggested by Aravumundan at least in view of their dependencies.

#### Claim 28

Independent claim 28 contains limitations similar to those recited in claim 1, and is rejected for the same reasons as claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claim 28 is not disclosed or suggested by Aravamundan.

#### Claims 29-32, 34-39 and 41

Claims 29-32, 34-39 and 41 all ultimately depend from independent claim 15, and therefore are not disclosed or suggested by Aravumundan at least in view of their dependencies.

#### Claim 42

Independent claim 42 contains limitations similar to those recited in claim 1, and is rejected for the same reasons as claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claim 42 is not disclosed or suggested by Aravamundan.

#### Claims 43-46, 47-53 and 55

Claims 43-46, 47-53 and 55 all ultimately depend from independent claim 15, and therefore are not disclosed or suggested by Aravumundan at least in view of their dependencies.

#### Claim 56

Independent claim 56 contains limitations similar to those recited in claim 1, and is rejected for the same reasons as claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claim 56 is not disclosed or suggested by Aravamundan.

#### Claims 57-58

Claims 57-58 all ultimately depend from independent claim 15, and therefore are not disclosed or suggested by Aravumundan at least in view of their dependencies.

#### Claim 59

Independent claim 59 contains limitations similar to those recited in claim 1, and is rejected for the same reasons as claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claim 59 is not disclosed or suggested by Aravamundan.

#### Claim 61

Independent claim 61 contains limitations similar to those recited in claim 1, and is rejected for the same reasons as claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claim 61 is not disclosed or suggested by Aravamundan.

#### Claim 62

Claim 62 ultimately depends from independent claim 64, and therefore is not disclosed or suggested by Arayumundan at least in view of its dependency.

#### Claim 64

Independent claim 64 contains limitations similar to those recited in claim 1, and is rejected for the same reasons as claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claim 64 is not disclosed or suggested by Aravamundan.

#### Claim 65

Claim 65 ultimately depends from independent claim 64, and therefore is not disclosed or suggested by Aravumundan at least in view of its dependency.

# Rejection under 35 U.S.C. § 103(a) over U.S. Patent No. 6,301,609 and U.S. Appl. Publ. No. 2002/0006803

#### Claims 6, 20, 33 and 47

Claims 6, 20, 33 and 47 all ultimately depend from an independent claim, and are not disclosed or suggested by the cited references, alone or in combination, at least in view of their dependencies.

#### Conclusion

For the reasons discussed above, applicant respectfully submits that the rejections of the Office Action have been shown to be inapplicable, and respectfully requests that the Board reverses the rejections to pending claims 1-12, 14-26, 28-39, 41-53, 55-59, 61-62, 64-65 and 67. If any additional fee is required for submission of this Amended Appeal Brief, the Commissioner is hereby authorized to charge Deposit Account No. 23-0442.

Respectfully submitted,

Date: 3 December 2007

s/Keith R. Obert/

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#### CLAIMS APPENDIX

The claims involved in the appeal are as follows:

 $1. \ Method \ for \ communicating \ a \ primitive \ from \ a \ terminal \ device \ to \ a \ network, \ said \ primitive$ 

having information elements with a structure recognized by said terminal device and at least one

other entity able to communicate over said network, comprising:

providing said primitive with an information element identifying a client of said terminal device,

and

providing said primitive also with an information element identifying a user of said client.

2. The method of claim 1, wherein said primitive is an update presence primitive for use in

communicating presence information to said network.

3. The method of claim 1, wherein said primitive is an unsubscribe presence primitive for

communicating a request to said network to discontinue receipt of selected presence information.

4. The method of claim 1, wherein said primitive is a leave group primitive for communicating a

request to discontinue participation in a group to said network.

5. The method of claim 1, wherein said primitive is a create group primitive for communicating a

request to create a group to said network.

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- The method of claim 1, wherein said primitive is a delete group primitive for communicating a request to delete a group to said network.
- 7. The method of claim 1, wherein said primitive is a get group information primitive for communicating a request for group information to said network.
- 8. The method of claim 1, further comprising: providing said primitive with an information element identifying a client of another terminal device, and

providing said primitive with an information element identifying a user of said client of said other terminal device.

- The method of claim 8, wherein said primitive is a get presence primitive for communicating a
  request for presence information to said network.
- 10. The method of claim 8, wherein said primitive is a subscribe presence primitive for communicating a request to subscribe to presence information to said network.
- 11. The method of claim 8, wherein said primitive is a message primitive for communicating a message to said network.
- 12. The method of claim 8, wherein said primitive is an invite user primitive for communicating a request to invite a user to said network.

13. The method of claim 1, wherein said at least one other entity comprises at least one server able to recognize said structure of said primitive, and the method comprises:

said client first logging onto said server without providing said primitive with information elements identifying said client and said user, but identifying a supported digest schema.

the client receiving back an authorization failure signal from said server with a nonce serving as a challenge for the client,

the client calculating a digest concatenating the nonce, a user password and a client identification using the supported digest schema,

the client once again logging onto said server but this time with the calculated digest,

the server recalculating the digest using the supported schema and using the nonce and the user password and client identification extracted by the server from the digest provided by the client, and

the server comparing the re-calculated digest with the provided digest and accepting the login if they match.

- 14. The method of claim 1, wherein said at least one other entity is configured to use said information element identifying a client of said terminal device and said information element identifying a user of said client to distinguish said user and said client.
- 15. System for communicating identification information over a network, comprising:

at least one terminal device for providing a primitive with an information element identifying a client of said terminal device and an information element identifying a user of said client, and at least one other entity for receiving said primitive provided over said network,

wherein said information element identifying a client of said terminal device and said information element identifying a user of said client are used by the at least one other entity to distinguish said user and said client.

- 16. The system of claim 15, wherein said primitive is an update presence primitive for use in communicating presence information to said network.
- 17. The system of claim 15, wherein said primitive is an unsubscribe presence primitive for communicating a request to said network to discontinue receipt of selected presence information.
- 18. The system of claim 15, wherein said primitive is a leave group primitive for communicating a request to discontinue participation in a group to said network.
- 19. The system of claim 15, wherein said primitive is a create group primitive for communicating a request to create a group to said network.
- 20. The system of claim 15, wherein said primitive is a delete group primitive for communicating a request to delete a group to said network.

- 21. The system of claim 15, wherein said primitive is a get group information primitive for communicating a request for group information to said network.
- 22. The system of claim 15, wherein said at least one terminal device is configured to provide said primitive with an information element identifying a client of another terminal device, and an information element identifying a user of said client of said other terminal device.
- 23. The system of claim 22, wherein said primitive is a get presence primitive for communicating a request for presence information to said network.
- 24. The system of claim 22, wherein said primitive is a subscribe presence primitive for communicating a request to subscribe to presence information to said network.
- 25. The system of claim 22, wherein said primitive is a message primitive for communicating a message to said network.
- 26. The system of claim 22, wherein said primitive is an invite user primitive for communicating a request to invite a user to said network.
- 27. The system of claim 15, wherein said at least one other entity comprises at least one server able to recognize a structure of said primitive,

wherein said client is configured to first log onto said server without providing said primitive with information elements identifying said client and said user, but identifying a supported digest schema, receive an authorization failure signal from said server with a nonce serving as a challenge for the client, calculate a digest concatenating the nonce, a user password and a client identification using the supported digest schema, and once again log onto said server but this time with the calculated digest,

and wherein the server is configured to recalculate the digest using the supported schema and using the nonce, the user password and client identification extracted from the digest provided by the client, compare the re-calculated digest with the provided digest and accept the login if they match.

- 28. Device for communicating a primitive over a network, said primitive having information elements with a structure recognized by at least one other entity of the network, wherein said device is configured to:

  provide said primitive with an information element identifying a client of said device, and
- provide said primitive also with an information element identifying a user of said client.
- 29. The device of claim 28, wherein said primitive is an update presence primitive for use in communicating presence information to said network.
- 30. The device of claim 28, wherein said primitive is an unsubscribe presence primitive for communicating a request to said network to discontinue receipt of selected presence information.
- 31. The device of claim 28, wherein said primitive is a leave group primitive for communicating a request to discontinue participation in a group to said network.

- 32. The device of claim 28, wherein said primitive is a create group primitive for communicating a request to create a group to said network.
- 33. The device of claim 28, wherein said primitive is a delete group primitive for communicating a request to delete a group to said network.
- 34. The device of claim 28, wherein said primitive is a get group information primitive for communicating a request for group information to said network.
- 35. The device of claim 28, wherein said device is further configured to: provide said primitive with an information element identifying a client of another device, and provide said primitive with an information element identifying a user of said client of said another device.
- 36. The device of claim 35, wherein said primitive is a get presence primitive for communicating a request for presence information to said network.
- 37. The device of claim 35, wherein said primitive is a subscribe presence primitive for communicating a request to subscribe to presence information to said network.
- 38. The device of claim 35, wherein said primitive is a message primitive for communicating a message to said network.

39. The device of claim 35, wherein said primitive is an invite user primitive for communicating a request to invite a user to said network.

40. The device of claim 28, wherein said at least one other entity comprises at least one server, and the client is configured to first log onto said server without providing said primitive with information elements identifying said client and said user, but identifying a supported digest schema, receive an authorization failure signal from said server with a nonce serving as a challenge for the client, calculate a digest concatenating the nonce, a user password and a client identification using the supported digest schema, and once again log onto said server but this time with the calculated digest.

- 41. The device of claim 28, wherein said at least one other entity is configured to use said information element identifying a client of said terminal device and said information element identifying a user of said client to distinguish said user and said client.
- 42. Server for communicating a primitive over a network, said primitive having information elements with a structure recognized by clients being able to communicate with said server over said network, wherein said primitive comprises an information element identifying a client and an information element identifying a user of said client.
- 43. The server of claim 42, wherein said primitive is an update presence primitive for use in communicating presence information.

- 44. The server of claim 42, wherein said primitive is an unsubscribe presence primitive for communicating a request to discontinue receipt of selected presence information.
- 45. The server of claim 42, wherein said primitive is a leave group primitive for communicating a request to discontinue participation in a group.
- 46. The server of claim 42, wherein said primitive is a create group primitive for communicating a request to create a group.
- 47. The server of claim 42, wherein said primitive is a delete group primitive for communicating a request to delete a group.
- 48. The server of claim 42, wherein said primitive is a get group information primitive for communicating a request for group information.
- 49. The server of claim 42, wherein said primitive further comprises: an information element identifying another client, and an information element identifying a user of said other client.
- 50. The server of claim 49, wherein said primitive is a get presence primitive for communicating a request for presence information.

- 51. The server of claim 49, wherein said primitive is a subscribe presence primitive for communicating a request to subscribe to presence information.
- 52. The server of claim 49, wherein said primitive is a message primitive for communicating a message.
- 53. The server of claim 49, wherein said primitive is an invite user primitive for communicating a request to invite a user.
- 54. The server of claim 42, wherein the server is configured to

receive a login message from said client without said primitive with information elements identifying said client and said user, but identifying a supported digest schema, transmit an authorization failure signal to said client with a nonce serving as a challenge for the client,

receive from the client a digest calculated by the client concatenating the nonce, a user password and a client identification using the supported digest schema,

recalculate the digest using the supported schema and using the nonce, the user password and client identification extracted from the digest provided by the client,

compare the re-calculated digest with the provided digest, and transmit a result signal to said client accepting the login if they match.

55. The server of claim 42, wherein said server is configured to use said information element identifying a client of said terminal device and said information element identifying a user of said client to distinguish said user and said client.

56. A physical device including a client, said client comprising various layers including a service capabilities layer responsive to various constituent information elements for combination into an outgoing primitive, said various constituent information elements including an information element identifying the client of said physical device and an information element separately identifying a user of said client.

57. The device of claim 56, wherein said primitive includes a request for a user identification, said user identification identifies a user which is a destination of a requested operation.

58. The device of claim 57, wherein said primitive further includes a request for a client identification, said client identification identifies a client of the user.

59. System for communicating a primitive over a network, comprising at least one terminal device and at least one other entity, wherein said terminal device comprises:

means for providing said primitive with an information element identifying a client of said terminal device, and

means for providing said primitive also with an information element identifying a user of said client.

and said at least one other entity comprises:

means for receiving said primitive provided by said terminal device over said network,

wherein said information element identifying said client of said terminal device and said information element identifying said user of said client are used by the at least one other entity to distinguish said user and said client.

60. The system of claim 59, wherein said at least one other entity comprises at least one server able to recognize a structure of said primitive, and said terminal device comprises:

means for first logging onto said server without providing said primitive with information elements identifying said client and said user, but identifying a supported digest schema,

means for receiving an authorization failure signal from said server with a nonce serving as a challenge for the client,

means for calculating a digest concatenating the nonce, a user password and a client identification using the supported digest schema, and

means for once again logging onto said server but this time with the calculated digest, and wherein the server comprises:

means for recalculating the digest using the supported schema and using the nonce and the user password and client identification extracted by the server from the digest provided by the client, comparing the recalculated digest with the provided digest and accepting the login if they match.

61. Device for communicating a primitive over a network, said primitive having information elements with a structure recognized by at least one other entity of the network, comprising: means for providing said primitive with an information element identifying a client of said device, and means for providing said primitive also with an information element identifying a user of said client.

62. The device of claim 61, further comprising:

means for providing said primitive with an information element identifying a client of another

device, and

means for providing said primitive with an information element identifying a user of said client

of said another device.

63. The device of claim 61, wherein said at least one other entity comprises at least one server,

and said device comprises:

means for first logging onto said server without providing said primitive with information

elements identifying said client and said user, but identifying a supported digest schema,

means for receiving an authorization failure signal from said server with a nonce serving

as a challenge for the client,

means for calculating a digest concatenating the nonce, a user password and a client

identification using the supported digest schema, and

means for once again logging onto said server but this time with the calculated digest.

64. Server for communicating a primitive over a network, said primitive having information

elements with a structure recognized by clients being able to communicate with said server over

said network, said primitive comprising:

an information element identifying a client of a terminal device, and

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an information element identifying a user of said client.

65. The server of claim 64, said primitive further comprising:

an information element identifying another client, and,

an information element identifying a user of said other client.

66. The server of claim 64, comprising:

means for receiving a login message from said client without said primitive with information elements identifying said client and said user, but identifying a supported digest schema, means for transmitting an authorization failure signal to said client with a nonce serving as a challenge for the client,

means for receiving from the client a digest calculated by the client concatenating the nonce, a user password and a client identification using the supported digest schema,

means for recalculating the digest using the supported schema and using the nonce and the user password and client identification extracted from the digest provided by the client.

means for comparing the re-calculated digest with the provided digest, and
means for transmitting a result signal to said client accepting the login if they match.

67. The method of claim 1, wherein said information element identifying said client of said terminal device comprises a client name and a client address, said information element identifying said user of said client comprises a user name and a user password.

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# EVIDENCE APPENDIX

None.

# RELATED PROCEEDINGS APPENDIX

None.